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# LOSS

OF THE

## SPARROW-HAWK IN 1626.

REMARKABLE PRESERVATION

AND

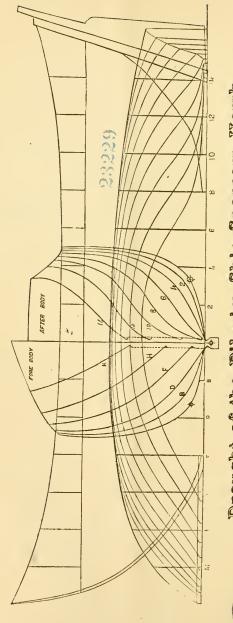
RECENT DISCOVERY OF THE WRECK.

BOSTON:

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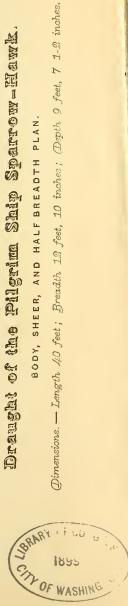
34 School Street.

1865.



Oranght of the Pilgrim Ship Sparrow-Hawk.

BODY, SHEER, AND HALF BREADTH PLAN.



# THE ANCIENT WRECK.

## CHAPTER I

Introductory Sketch.—Removal of the Hull to Boston.—

Communication from Messrs. Dolliver and Sleeper.—

Statement of D. J. Lawlor, Esq.—Model and Draught.

covered in 1863, may be justly regarded as one of the greatest curiosities of the age. This ship sailed from England for Virginia, in the fall of 1626, with a large number of emigrants. After a long passage, she went ashore on Cape Cod, and was there finally wreeked in a place then known as Potanumaquut Harbor. Details of her passage and loss, and the subsequent career of her passengers, have been preserved by contemporary historians, from whom we shall make brief extracts in the course of this work.

From the several local histories of the Cape, the posthumous edition of Thoreau's work, and an important note from Professor Agassiz, the public have been made aware of the continuous geological changes of that remarkable mass of drift, which we denominate "Cape Cod." The statements of these various authors are singularly elucidated and confirmed by the history

of "The Ancient Wreck." The preservation and discovery of the Sparrow-Hawk present facts of startling interest to all, — but especially to those who are acquainted with the minutiæ of early colonial history. They have in mind, and can readily recall with us, the condition of the passengers, and the fate of their eraft.

Benjamin Drew, Esq., of Chelsea, formerly of Plymouth, Mass., who had the good fortune to see the wreck upon the beach at Orleans, before its removal, presents us with the following remarks, which we here insert as a suitable preface to the historical details:—

As I stood upon the shore, surveying with my friend\* the remains of the vessel which crossed the ocean two hundred and forty years ago, imagination brought vividly before me the scenes of that early voyage, the wrecking of the ship, and the providential escape of the passengers and crew. Two hundred and forty years! yes, nearly that long period had elapsed from the time of its protracted and unsuccessful battling with the elements, and its subsequent submergence in these sands of Nauset; and to-day the sea, recovering the dominion it so long ago yielded to the land, has disclosed to us the hull in all its fair proportions and symmetry as it glided into the water from the builder's hand, in the reign of James the First.

The deep human sympathy which attaches to every scene where men have fought or suffered, — which treasures every relic of the times of the Pilgrims,

<sup>\*</sup> Dr. B. F. Seabury, of Orleans, who made the measurements for the first drawings.

invests this ancient wreek with a deep and abiding interest. As we behold it, we seem to see Mr. Fells, Mr. Sibsie, and the "many passengers" casting anxious eyes to the west; for it is stormy weather, and the sea is rough, and they have been six weeks afloat, "and have no water, nor beere, nor any woode left;" and there is Captain Johnston "sick and lame of ye scurvie," so he can "but lye in his cabin dore and give direction;" and we observe that the passengers are "mad for land," and so through "fear and unruliness," compel the mariners "to stear a course betweene ye southwest and norwest, that they might fall in with some land, what soever it was, earing not." And we recall, too, the wild scene, when in the night they grated on the bar of an unknown shore: the morning distress, when their cable parted and they beat over the shoal, — their joy at drifting safely on a beach with only the soaking of their cargo, - for they now discover that a plank has started, and that the oakum has left the seams. We listen with them to the strange voices of the red men; nor do we wonder that they "stand on their guard:" but hark! these red men talk English, and they tell of "New Plymouth" and "ye Governor." So Mr. Fell and Mr. Sibsie sit in the cabin here, — this same cabin! — and write to the Governor; anon that worthy personage crosses the bay, bringing spikes and material for repairs; he steps on board, and gives his advice in the premises. They get a supply of corn, and repair their ship, intending once more to make sail for Virginia; surely they will find it this time! Before, "they had lost themselves at

sea;" but now they will take a new departure, and will soon reach the land of their hopes. Not yet, my worthy friends, — your tight, "serviceable" eraft, now afloat, must be driven upon the eastern side of the inner harbor, and hopelessly wrecked; you must sojourn with the Pilgrims; and the Sparrow-Hawk, giving a name to "Old Ship Harbor," must lie for centuries under the sand and under the salt-marsh; successive generations of Doanes shall swing the scythe, and toss the hay, over her forgotten grave; but, in due time, when these rocky, wooded islands, shall have sunk

"Beneath the trampling surge, In beds of sparkling sand,"

your ship shall stand revealed again,—timbers and planks all sound, the "occome" vanished from her seams, and "ye spikes" and all other iron dissolved away; but we shall find your old sandals, and the beef and mutton bones which you picked when you bade your vessel a last good-by; and we shall feel a kindred satisfaction in re-lighting the long-extinguished fires in these venerable tobacco-pipes which you forgot to take away; and we shall send your rudder for a while to, the Exchange in State Street; and that, and all the timbers and planks which you feel so sorry to leave, we shall,—Mr. Fells, and Mr. Sibsie, and Capt. Johnston, by your leave,—remove to a dry locality, and there, at our leisure, explore the privacy of your cabin, and listen to your conversation with Samoset and Governor Bradford.

If the "Advance," which was shut in by Arctic ice, and abandoned by Elisha Kent Kane, should some day

be sent adrift in a contest of icebergs, float into the Atlantic, and be towed into harbor, we can readily imagine the interest with which she would be regarded. If the "tossut" remained, who would not be anxious to creep through it into the sacred precincts so long the home of the great adventurer,—the abode, likewise, of Hans, and Ohlsen, and Morton,

"Whose latitudinous eye Beheld the billows roll, 'Neath the long summer's genial sky, Around the northern pole?"

What crowds would come from all parts to see the famous brig! But here is the hull of a ship of more worthy fame than the Advance,—one which crossed the Atlantic while Boston was inhabited by Indians; when this continent was, indeed, the new world,—a ship which came freighted with passengers, who became, by force of circumstances, residents with, and, of course, friends of, the Pilgrim Fathers; and who long retained in their Virginia homes a sense of gratitude for favors received in the time of their trial. May those days of mutual good will return!

CHARLES W. LIVERMORE, Esq., of this city, a member of the City Council, and Leander Crosby, Esq., of Orleans, a well-known resident of the immediate vicinity of Old Ship Harbor, with a laudable desire to preserve so remarkable a relic, have removed the hull to Boston, and had all the parts put together in proper order by Messrs. Dolliver and Sleeper, well known and experienced ship-builders. Thus will be perpetuated a

ship which sailed the ocean contemporary with the Mayflower, — doubtless the only one of that remote age now existing on the face of the earth. Truly, a most unique curiosity, and well worthy the attention of all men.

Mr. Livermore requested Messrs. Dolliver and Sleeper to communicate in writing all matters relating to the style of building, the condition of the hull, and any other particulars which might be of interest. Those gentlemen, having put planks and timbers together in their pristine shape, have furnished the following information in accordance with the request of Mr. Livermore:

Boston, August 17, 1865.

CHARLES W. LIVERMORE, ESQ.

Dear Sir,— While putting into their original position the various portions of the ship so long buried at the Cape, we have, as you requested, taken special note of her peculiarities, &c., and in compliance with your desire send the following statement.

Notwithstanding the many years which this vessel has been exposed to the fury of the elements, and to the action of the shifting sands in which she has been buried, her outline has been remarkably well preserved. Only a practised mechanical eye could detect a little inequality in her sides, in consequence of her having had a heel to port. We have replaced the keel, sternpost, stern-knee, part of the keelson, all the floor timbers, most of the first futtocks and the garboard strake on the starboard side; but the stem and forefoot, the top timbers and deck are gone. Enough of her, however, remains to enable us to form a fair estimate of her general outline when complete. The model made by D. J. Lawlor, Esq., embodies our idea of her form and size.

Her length on the keel when complete was twenty-eight feet ten inches, and she had great rake of stem with a curved forefoot, and the rake of her sternpost is four inches to the foot. The great rake of her stem and sternpost makes her length on deck between extremes about forty feet, and her depth about nine and one-half feet. Her forward lines are convex, her after lines sharp and concave, and her midship section is almost the arc of a circle. Her breadth of beam was about twelve feet and her sheer two and one-half feet, with a lively rise at both ends. She had a square stern, and no doubt bulwarks as far forward as the waist; but the outline of the rest of her decks was probably protected by an open rail.

As ballast was found in her, she may have been deeper than we have described her, or heavily sparred, for it is not customary to put ballast in a vessel with a heavy cargo unless she is very crank. We mean such a cargo as she probably carried from England. The rig common to vessels of her size at the time she was built consisted of a single mast with a lateen yard and triangular sail. There is a hole in her keelson for the step of the mast.

No doubt her deck was flush, for trunks and houses are of modern invention, and that all her accommodations, and even her galley, were below. It is probable that she had a small permanent cabin aft, with a companion and binnacle; but we suppose, that, after the cargo was stowed, a small platform deck was laid over it for the crew. The hemp cables would be stowed forward below, with such spare cordage and sails as might be required for a passage across the Atlantic Ocean. The quarters for the crew, and the galley, would be abaft these, and the entrance to them through the main hatchway.

We notice by grooves in her floor timbers that she had limber-ropes for the purpose of keeping a clean channel for the water to flow toward the well. She unquestionably carried a small boat on deck, and this, with the anchors, we suppose, were her only incumbrances. Such we conceive to be a fair sketch of her, when she was complete. We will now give a sketch of her as she is.

Her keel is of English elm, twenty-eight feet six inches long, sided eight inches and moulded six; the floor timbers amidships are seven feet one inch long, moulded seven inches and sided six, all of oak hewn square at the corners and fastened through the keel with one-inch oak treenails wedged in both ends. The first futtocks overlap the floor-timbers about two feet, placed alongside of them, forming almost solid work on the turn of the bilge, with a glut or chock below each of them, but they were not fastened together. She has not any navel timbers. We suppose that the joints of the second futtocks overlapped in the same style as those below them. As already stated, her stem and forefoot are gone; but a part of her sternpost, and her stern-knee entire, are left. The sternpost is mortised into the keel, and has been bolted through it and the knee; but the iron has been oxidized long since. Instead of deadwood aft she has seven forked timbers, the longest four feet in the stem, with a natural branch on each side, and six inches square. Some of these were half faved to the keel, but none of them were fastened. Through these the planking was treenailed. Part of the keelson is now in its place; it is sided ten inches and moulded eight, and was fastened to the keel with four iron bolts, driven between the floor-timbers (not through them) into the keel.

Her breadth at present, at four feet two inches depth, from the outside of the timbers, is eleven feet six inches, but when planked, as already stated, it was no doubt twelve feet. She had only three strakes of ceiling, all the rest of the timbers were bare; but she had no doubt a stout clamp for her deck-beams to rest upon and partner-beams as a support to

her mast. Her planking was two inches thick, of English oak, fastened with oak treenails. Most of the planks are ten inches wide. The keel has been cut to receive the lower edges of the garboards, which had been spiked to it as well as treenailed through the timbers. The starboard garboard strake is now in its place; and this is the only planking we have put on, for the other strakes are somewhat warped. Her outline, however, is perhaps more clearly defined than if she had been planked throughout. It seems to us that after her floor-timbers were laid and planked over, that the other timbers were filled in piece by piece as the planking progressed, which is still a favorite mode of building in some ports of England, and were not jointed together and raised entire before planking. By the appearance of the planks they have been scorched on the inside and then suddenly saturated in water for the purpose of bending them into shape, as a substitute for the modern mode of steaming. The planks and treenails which have not been used by us are preserved with care, and may be seen by those who wish a more minute description of her construction. We suppose she had a heavy planksheer or covering-board, and that her deck, like her planking, was of English oak. We consider her model superior to that of many vessels of the same size and even larger, which have been recently built in Nova Scotia, and which may be seen in this port every summer.

Yours truly,

#### DOLLIVER & SLEEPER.

With a desire to furnish ship-builders, and others interested in naval construction, a plan of the ship, D. J. LAWLOR, Esq., naval architect, has constructed a model of the hull, including the upper works, as they must have originally existed. Mr. Lawlor's scientific

attainments, of which the Government has availed itself in the construction of some of the finest ships in our navy, have enabled him to reproduce in a model the original lines of the hull, — showing perfectly the position and shape of those portions which were worn away before its complete burial in the sand. A draught from this model is on the second page of this work.

A written statement accompanies Mr. Lawlor's model, and his views, it will be seen, coincide with those of Messrs. Dolliver and Sleeper.

The statement of Mr. Lawlor is as follows:

CHELSEA, Aug. 22, 1865.

C. W. LIVERMORE, Esq.:

Dear Sir, - I have examined the Pilgrim ship, and find her quite a curiosity in naval architecture, so different are her model and proportions from those of sea-going vessels of the present day. So much of her hull remains entire, that I did not find it a difficult task to produce the lines, and complete a perfect working model, which I send you herewith. I might furnish you with an exact list of measurements, tonnage, &c., and point out the more remarkable peculiarities of her construction; but those who may have an opportunity to see the ship will obtain a far better idea of the ancient style of building than I could hope to give by any verbal description, however minute. She must have been an easy sea-boat, and, for that early day, well adapted to the carrying of passengers. The pleasure of observing and studying so ancient and unique a specimen of ship-building has more than repaid the time and attention I have been able to bestow upon it.

Yours, resp'ly,

D. J. LAWLOR.

An inquiry naturally suggests itself, By what means has a wreck, so perfect that a "working model" could be constructed from it, been so long preserved? Ordinarily, wrecks, being exposed to the direct action of the winds and waves, soon break up and disappear. How does it happen that this wreck formed an exception? That it was preserved by being embedded and buried in the sand, has been already intimated. The causes which at first operated to bury and conceal, and, at length, by their continued action brought the wreck to light, will be considered in the following chapter.

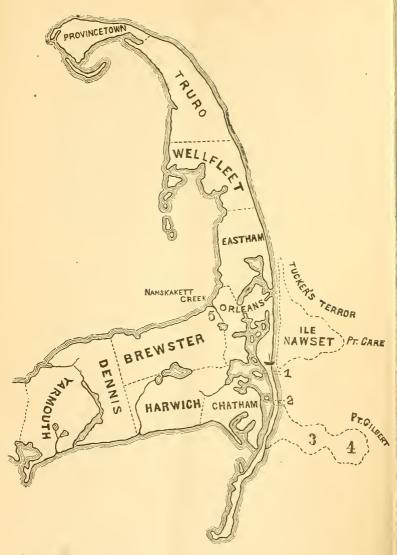
### CHAPTER II.

GEOLOGICAL CHANGES OF THE CAPE. — HOW THEY AFFECTED THE WRECK. — EFFECTS OF SINGLE STORMS.

SHORE composed of the geological formation known as "drift," and directly exposed to the action of the sea, is doomed to undergo many and rapid changes. By comparing the map, inserted on the next page, of Cape Cod as it was at the time of its discovery, with the modern map, the great changes made on the eastern coast by winds, waves and tides will be at once made apparent.

In regard to the geological changes, we present here a short extract from the recently published and highly entertaining work of Thoreau:

<sup>&</sup>quot;Between October, 1849, and June of the next year, I



Site of former entrance to Potanumaquut or old ship harbor. The locality of the old ship is represented in black.
 Present entrance to Chatham harbor.
 Island ledge.
 Webb's island.
 Namskachet creck.

found that the bank [in Truro] had lost about forty feet in one place, opposite the lighthouse, and it was cracked more than forty feet from the edge at the last date, the shore being strewn with the recent rubbish. But I judged that generally it is not wearing away here at the rate of more than six feet annually. . . . The general statement of the inhabitants is, that the Cape is wasting on both sides, but extending itself on particular points on the south and west, as at Chatham and Monomoy Beaches, and at Billingsgate, Long and Race Points. James Freeman stated in his day that above three miles had been added to Monomoy Beach during the previous fifty years, and it is said to be still extending as fast as ever. A writer in the Massachusetts Magazine, in the last century, tells us that 'when the English first settled upon the Cape, there was an island off Chatham, at three leagues' distance, called Webbs' Island, containing twenty acres covered with red cedar or savin. The inhabitants of Nantucket used to carry wood from it;' but he adds that in his day a large rock alone marked the spot, and the water was six fathoms deep there. The entrance to Nauset harbor, which was once in Eastham, has now travelled south into Orleans. . . .

"On the eastern side the sea appears to be everywhere encroaching on the land. . . . The bars along the coast shift with every storm."

In the hurricane of April, 1851, in which Minot's Ledge lighthouse was swept away, many and great changes took place on the eastern side of the Cape. A deep and spacious entrance was made into Chatham harbor, which still continues to be very advantageous to the towns of Harwich and Orleans; but the subsequent extension of bars, from an island lying in the direction of Chatham, now prevents the business portion of that

place from deriving that benefit from the new opening which they at first received.

Thoreau thus speaks of what fell under his own observation, during his last visit to Cape Cod:

"We ourselves observed the effect of a single storm with a high tide in the night, in July, 1855. It moved the sand on the beach opposite [Highland] lighthouse to the depth of six feet, and three rods in width as far as we could see north and south, and carried it bodily off, no one knows exactly where, laying bare in one place a rock five feet high, which was invisible before, and narrowing the beach to that extent. There is usually, as I have said, no bathing on the back side of the Cape, on account of the undertow, but when we were there last the sea had three months before cast up a bar near this lighthouse, two miles long and ten rods wide, leaving a narrow cove, then a quarter of a mile long, between it and the shore, which afforded excellent bathing. This cove had from time to time been closed up as the bar travelled northward, in one instance imprisoning four or five hundred whiting and cod, which died there, and the water as often turned fresh, and finally gave place to sand. This bar, the inhabitants assured us, might be wholly removed, and the water six feet deep there in two or three days."-p. 142.

Along the eastern shores of Eastham and Orleans, the strong current of the ebb and of a portion of the flood tide sets in a southerly direction,—the undertow breaking up and carrying with it the sands from the bottom. On reaching the mouth of the Potanumaquut harbor the current, setting in, deposits this sand, thus prolonging the northern point of the entrance-way; but, acting more directly on the southern point, and aided

by the retreating sea at ebb tide, the moving mass of water must necessarily cut away the southerly bank,—so that the northern point continually increasing in length and the southern point shortening, or losing material, the harbor entrance is continually travelling southward.

When the Sparrow-Hawk grounded for the last time within the northern point, under the influence of a westerly gale, the sand must have rapidly accumulated about her, in the manuer and from the causes we have just described. Still there would be, for a considerable time, shallow waters about her after the sand had filled in the bay nearly to her deck; and the ends of her timbers which were uppermost show at this date the rounded form which we should expect to find from a flow of waves and the attrition of the sands. But the wind is also busy on the bleak shore of the Cape; the sand is blown inward from the top of the sea line of cliffs; and in a few years from her first becoming embedded, she must have been completely submerged. Above and around her, at length the salt-marsh extended itself; but the place was well known, and the name of "Old Ship Harbor" then obtained, - nor was this name forgotten, although all knowledge of the ship itself had faded from the memory of men.

In further illustration of our subject, we insert an extract from the Massachusetts Historical Collections, vol. viii. p. 143. Boston: Munroe & Francis, 1802:—

"Few towns in the county are so well provided with harbors as Chatham. The first and most important, is on the eastern side of the town, and is called Old harbour. It is formed by a

narrow beach, which completely guards it against the ocean. The haven on the western side of this beach is extensive; but the harbour of Chatham is supposed to reach not farther north than Strong island, a distance of about sour miles. Above that, the water, which is within the limits of Harwich and Orleans, is known by other names. The breadth of the harbour, is about three-quarters of a mile. Its entrance, a quarter of a mile wide, is formed by a point of the beach and James' head, east of it on the main land. On the inside of the beach are slats and salt marsh. There is also a piece of marsh on the southern part of Strong island. These marshes are covered during every tide.

"There are no rocks either within or near the harbour; but its mouth is obstructed by bars, which extend east and southeast of the point of the beach three quarters of a mile. On each side of this mouth is a breaker, — one called the North, and the other the South breaker. There are also several bars in the harbour within the outer bars. These bars are continually shifting, — the causes of which are storms and a strong current which sets in and out of the harbour. At low water, there are seven seet on the outer bars, common tides rising about six seet. North of them, the shore is bolder. There is good holding ground in the harbour. At the entrance, the bottom is sandy. Farther in there is a muddy bottom. The depth at low water is about twenty seet.

"Not only do the bars alter, but the mouth of the harbour also is perpetually varying. At present it is gradually moving southward by the addition of sand to the point of the beach. The beach has thus been extended above a mile within the course of the past forty years.

"In the year 1626, there was an entrance into Monamoyick harbour, opposite Potanumaquut, six miles north of the present mouth. The ship mentioned by Prince\* came in here, and

<sup>\*</sup> Annals, p. 163. See also Morton's Memorial, p. 89, A. D., 1627.

was stranded on the beach, where its ruins were to be seen about twenty years ago. This part of the beach still bears the name of the Old Ship. The entrance has been closed for many years. Several passages into the harbour have been opened and shut since that time. At a late period, there were two openings into the haven, — one of which, that which now exists, was styled the Old harbour, and the other, the New harbour.\* Though the mouth of the New harbour is entirely choked up with sand, yet the name, Old harbour, is still retained.

"It is not easy to give directions for failing into so inconstant a port. None but a pilot who is well acquainted with its yearly variations can guide in a vessel with safety. On a signal being made, however, boats are ready to put off from the shore, to yield assistance. In a north-east storm, in which a pilot cannot leave the land, a vessel, by getting to the south of the South breaker, may, at present, ride with safety. But how long this will be true, it is impossible to say."

The following account of a tremendous storm and its effects, is from the able work of the Rev. FREDERICK FREEMAN, — "History of Cape Cod; Annals of Barnstable County and of its several towns":—

"Among the remarkable events of this early period is recorded that of a violent storm which did great damage, the tide rising twenty feet perpendicular." Hubbard and Morton say: 'The Narragansets were obliged to betake themselves to the tops of trees, and yet many of them were drowned. Many hundred thousand of trees were blown down, turning up the stronger by the roots, and breaking the high pines and such like in the midst. Tall young oaks and walnut trees of good bigness were wound as a withe by it."

<sup>\*</sup> See Des Barres' accurate chart of the coast.

"Governor Bradford's account of the storm is as follows: 'In 1635, August 15, was such a mighty storm of wind and rain as none living in these parts, either English or Indians, ever saw. It began in the morning a little before day, and came with great violence, causing the sea to swell above twenty feet right up, and made many inhabitants climb into the trees. . . . It began southeast, and parted toward the south and east, and veered sundry ways. The wrecks of it will remain a hundred years. The moon suffered a great eclipse the second night after it.

"It was in this storm that Mr. Thacher was cast ashore at Cape Ann, on what was afterward known as Thacher's Island. Twenty-one persons were drowned. None were saved but Mr. Anthony Thacher and wife."

### CHAPTER III.

Bradford's Account of the Wreck. — His Visit to the Scene of the Disaster. — The Passengers and Crew received at Plymouth. — Tradition of the Name "Sparrow-Hawk." — Extracts from the Work of Amos Otis, Esq. — Recovery and Saving of the Wreck.

E now proceed to give the history of the ancient ship according to the chronological order of events. The reader's attention is invited to the following interesting and important extract from "Bradford's History of Plymouth Plantations, A. D. 1626-7," MS. p. 146:—

"Ther is one thing that fell out in ye begining of ye winter before, which I have refferred to this place, that I may handle ye whole matter togeither. Ther was a ship, with many passen-

gers in her and fundrie goods, bound for Virginia. They had lost them selves at sea, either by ye insufficiencie of ye maister, or his ilnes; for he was fick & lame of ye scurvie, fo that he could but lye in ye cabin dore & give direction; and it should feeme was badly affisted either wth mate or mariners; or else ye fear and unrulines of ye passengers were such, as they made them ftear a course betweene ye southwest & ye norwest, that they might fall with fome land, what foever it was they cared not. For they had been 6. weeks at fea, and had no water, nor beere. nor any woode left, but had burnt up all their emptie caske; only one of ye company had a hogshead of wine or 2. which was allfo allmost spente, so as they feared they should be starved at fea, or confumed with difeases, which made them rune this defperate course. But it plased God that though they came so neare ye shoulds of Cap-Codd [147] or elfe ran stumbling over them in ye night, they knew not ohw, they came right before a small blind harbore that lyes aboute ye midle of Manamoyake Bay to ye Southward of Cap-Codd, with a small gale of wind; and about highwater toucht upon a barr of fand that lyes before it, but had no hurte, ye fea being fmoth; fo they laid out an anchore. But towards the eveing, the winde sprunge up at sea, and was fo rough, as broake their cable, & beat them over the barr into ye harbor, wher they faved their lives & goods, though much were hurte with falt water; for wth beating they had fprung ye but end of a planke or too, & beat out their occome; but they were foone over, and ran on a drie flate within the harbor, close by a beach; so at low water they gatt out their goods on drie shore, and dried those that were wette, and faved most of their things without any great loss; neither was ye ship much hurt, but shee might be mended, and made fervifable againe. But though they were not a litle glad that they had thus faved their lives, yet when they had a litle refreshed them selves, and begane to thinke on their condition, not knowing wher they were, nor what they should doe, they begane

to be strucken with sadnes. But shortly after they saw some Indians come to them in canows, which made them stand upon their gard. But when they heard some of ye Indeans speake English unto them, they were not a litle revived, especially when they heard them demand if they were the Gover of Plimoths men, or freinds; and yt they would bring them to ye English houses, or carry their letters.

They feasted these Indeans, and gave them many giftes; and fente 2. men and a letter with them to ye Gover, and did intreat him to fend a boat unto them, with fome pitch, & occume, and spiks, wth divers other necessaries for ye mending of ther ship (which was recoverable). Allso they befought him to help them with fome corne and fundrie other things they wanted, to enable them to make their viage to Virginia; and they should be much bound to him, and would make fatisfaction for any thing they had, in any comodities they had abord. After ye Gov was well informed by ye messengers of their condition, he caused a boate to be made ready, and fuch things to be provided as they write for; and because others were abroad upon trading, and such other affairs, as had been fitte to fend unto them, he went him selfe, & allso carried fome trading comodities, to buy them corne of ye Indeans. "It was no feason of ye year to goe withoute ye Cape, but understanding wher ye ship lay, he went into ye bottom of ye bay, on ye infide, and put into a crick called Naumskachett,\* wher it is not much above 2. mile over [148] land to ye bay wher they were, wher he had ye Indeans ready to cary over any thing to them. Of his arrivall they were very glad, and received the things to mend ther ship, & other necessaries. Allso he

<sup>\*</sup> In the northwest quarter of the township, on Barnstable Bay, is Namskeket Creek, which is three quarters of a mile long, and which, as far as it runs, is the dividing line between Orleans and Harwich [now Brewster.]" Description of Orleans, in 1 Mass. Hist. Coll., VIII., 188. — Ed.

bought them as much corne as they would have; and wheras some of their sea-men were rune away among ye Indeans, he procured their returne to ye ship, and so lest them well furnished and contented, being very thankfull for ye curtefies they receaved. But after the Gover thus left them, he went into some other harbors ther aboute, and loaded his boate with corne, which he traded, and fo went home. But he had not been at home many days, but he had notice from them, that by the violence of a great storme, and ye bad morring of their ship (after she was mended) she was put a shore, and so beatten and shaken as the was now wholy unfitte to goe to fea.\* And fo their request was that they might have leave to repaire to them, and foujourne with them, till they could have means to convey them felves to Virginia; and that they might have means to trafport their goods, and they would pay for ye fame, or any thing els wher with ye plantation should releeve them. Considering their diftres, their requests were granted, and all helpfullnes done unto them; their goods transported, and them selves & goods sheltered in their houses as well as they could.

"The cheefe amongst these people was one Mr. Fells and Mr. Sibsie which had many servants belonging unto them, many of them being Irish. Some others ther were ythad a servante or 2. a peece; but ye most were servants, and such as were ingaged to the former persons, who allso had ye most goods. After they were hither come, and some thing setled, the maisters desired some ground to imploye ther servants upon; seing it was like to be ye latter end of ye year before they could have passage for Virginia, and they had now ye winter before them; they might clear some ground and plant a crope, (seeing they had tools & necessaries for ye same) to help to bear their charge, and keep their

<sup>\*</sup> The beach where this ship was stranded still bears the name of Old Ship, and it is said that some portions of the wreck were to be seen about seventy years ago. See 1 Mass. Hist. Coll., viii., 144.—
Ed.

fervants in imployment; and if they had oppertunitie to departe before the fame was ripe, they would fell it on ye ground. So they had ground appointed them in convenient places, and Fells & fome other of them raifed a great deall of corne, which they fould at their departure."

The historian here details some domestic infelicities of Mr. Fells in consequence of which the Plymouth Pilgrims

"pact him away & those that belonged unto him by the first oppertunitie, and dismisse all the rest as soone as could, being many untoward people amongst them; though ther were allso some that caried them selves very orderly all ye time they stayed. And the plantation [149] had some benefite by them, in selling them come & other provisions of food for cloathing; for they had of diverse kinds, as cloath, perpetuanes, & other stuffs, besids hose, & shoes, and such like comodities as ye planters stood in need of. So they both did good, and received good one from another; and a cuple of barks caried them away at ye later end of somer. And sundrie of them have acknowledged their thanksullness since from Virginia."

To the account of the loss of the ship, Freeman's "History of Cape Cod; Annals," &c., appends the following note:

"The beach where this ship was wrecked was thenceforward called "The Old Ship." The remains of the wreck were visible many years."

In the able pamphlet of Amos Otis, Esq., Member of the New England Historie-Genealogical Society, "Discovery of an Ancient Ship," allusion is made to the tradition that the name of the old ship was "Sparrow-Hawk." Mr. Otis speaks of this tradition as

uncertain. We will give the tradition as it is, and leave it to make its own impression on our readers. A family by the name of Sparrow has long resided in the close vicinity of the Old Ship Harbor. The first settler of the name, Mr. Jonathan Sparrow, bought the land, where the family now live, in 1675. The present proprietor, Mr. James L. Sparrow, states that it had been "handed down" from father to son that there was an old ship buried in the sand in Potanumaquut Harbor in the early days of the colony, and that its name was "Sparahawk," or "Sparrow-Hawk."

Mr. Otis remarks, that "the evidence which seems to prove beyond a reasonable doubt that those remains belong to the ship which Gov. Bradford informs us was lost in Potanumaquut harbor in the winter of 1626-7 ... is principally based on the geological changes that have occurred on the coast, since its discovery. · Archer's account of Gosnold's voyage around the Cape, in 1602, and of the appearance of the coast, is so unlike anything seen by the modern mariner, that his relation has been considered a myth or traveller's tale, unreliable and unworthy of credence. Geological inquiries may seem out of place in a historical and genealogical journal; but if they do nothing more, they will verify the accuracy of Archer's descriptions, and thus aid us in our investigations of the truths of history.

"The accounts of the wrecked ship in Morton and Prince, are copied from Bradford. Morton is not careful in his dates, but he informs us that the master was a Scotchman, named Johnston, a fact not

stated by Bradford. Mr. Prince with his accustomed accuracy, states that a ship was lost in the beginning of the winter [December], 1626. Gov. Bradford's description of the place where the ship was lost, would be perfectly clear and distinct if the configuration of the coast was the same now as it was when he wrote. Namaskachet Creek remains, but Isle Nauset, Points Care and Gilbert, have been swept away by the waves and currents of the ocean. Where Monamoick Bay was, there is a straight line of sea-coast; where an open sea then was, now long beaches meet the eye; and where were navigable waters, now we see sandy wastes and salt meadows.

"Such remarkable changes having been made in the configuration of this coast since its discovery by Gosnold, and its examination by Smith, in 1614, is it surprising that the knowledge of the location of "Old Ship Harbor" should have been lost, or that the readers of Bradford should have been unable to determine where Monamoick Bay was?

"Prof. Agassiz, of Cambridge, in company with the writer and others, has recently made a careful geological examination of the eastern coast of the towns of Eastham, Orleans, and Chatham . . . . . The result was a verification of the accuracy of Archer's description of the coast.

"This examination enables me to draw an outline map of the coast as it was in 1602, and in 1626. I have also a map of the harbors, beaches, and salt meadows as they were, and as they now are." [V. map, p. 14.]

In Gov. Bradford's account, which we have already quoted, he says that "he landed on Naumskachett creek" on the inside of the bay. From the fact that the distance from this creek, which now forms a part of the boundary line between Brewster and Orleans, to the navigable waters of Potanumaquut is about two miles,—as stated by Bradford,—while to Nauset harbor, the distance is greater, Mr. Otis considers it proved "beyond controversy that Potanumaquut was the harbor into which the ship 'stumbled.'"

We quote from Mr. Otis, the facts in relation to the discovery:

"On the 6th of May, 1863, Messrs. Solomon Linnell, 2d, and Alfred Rogers, of Orleans, were on Nauset Beach, and discovered portions of a wreck. Mr. Linnell was at the same place on the 4th, when no part of the wreck was visible. This proves that it was uncovered between the 4th and 6th of May, 1863. When first discovered, it was partially covered with the marsh mud in which the wreck had been embedded. On removing some of the mud, they found a quantity of charcoal, and the appearance of the timbers and planks indicated that the vessel of which these were the remains had been burnt.\* On Saturday, May 9, Leander Crosby, Esq., visited the wreck, and collected a quantity of beef and mutton bones; several soles of

\*A more close examination of the vessel showed this to be incorrect. The charred surface of plank was found in close contact with timbers which had not been burned at all. The inference is, that the plank was partially charred, while being heated for the purpose of bending it,—the modern process of steaming, not having yet come into vogue.

shoes, probably made for sandals; a smoking pipe of the kind used by smokers of opium; and a metallic box."

Dr. Benj. F. Seabury and John Doane, Jr., afterwards visited the wreck, and found the rudder lying a few feet distant; this they removed, and it is now deposited in the hall of the Pilgrim society, at Plymouth. Messrs. Seabury and Doane took measurements of the ship, and public attention was now drawn to a consideration of the subject.

"The peculiar model of the wreck excited the curiosity of the people, and although four miles from the village, it was visited by hundreds, and each one took a fragment as a memento of his visit At the time the writer was there the current had swept out a basin in the sand around the wreck, and it being low tide, every part excepting the keel could be examined. One striking part was immediately noticed by everyone, - the long, tail-like projection at the stern. The oldest sailor never saw a vessel built on that model, she must have had, to use a nautical expression, "a clean run," and have been a good sea-boat. . . . . She had been most carefully built. The frames were placed side by side. . . . . There were twenty-three regular frames remaining, or forty-six timbers, not counting the six at the stern. At the bow several frames were missing. The planks were fastened with spikes and treenails, in the same manner as at the present time. Some of the treenails had been wedged after they were first driven, showing that some repairs had been made.

"The timbers and planks of the old ship are very

sound, there is no appearance of rot. There are no barnacles upon them, they are not eaten by worms, and there is no indication that they have been for any considerable length of time exposed to the action of the elements. The spikes, bolts and other fastenings of iron have entirely disappeared, . . . . rust had gradually consumed them, and discolored sand indicated the places where the iron once was. The wreck was embedded in marsh mud and covered deeply in sand. Under such circumstances air was almost wholly excluded, and oxidation must have been slow.

"Though called a ship, she had only one mast, and that as shown by the mortise in the keelson, was nearly midship."

"In August last, the wreck was again covered with sand, and is now buried several feet below the surface, where it may remain undiscovered for ages. Centuries hence some plodding antiquarian may labor to prove it to be the same I have described in this article.\*

\*This was not to be, however. For, a few months after, the capricious sea exhumed her once more, when the wreck was removed beyond and above high-water mark.

In the winter of 1860-61, in a storm, a new channel of sufficient depth for fishing-boats to pass out and in, opened in the beach, a short distance south of where the wreck lay. Through this channel the tide ebbed and flowed; and such was its effect on the currents that a cove or indentation was made in the beach nearly opposite the grave of the Sparrow-Hawk. This indentation became deeper and deeper, until at length the hull revisited the glimpses of the day. At the time of this writing, the channel and the cove have disappeared; in their place is a straight line of sea-beach, and there are ten feet of sand where the old vessel lay. But for this accidental opening and consequent abrasion of the beach, the vessel might, indeed, have remained "undiscovered for ages."

"One point remains to be considered. Is the wreck recently discovered a part of Capt. Johnston's ship, lost in 1626? The reader will look at his map. 'He Nawset' was of the drift formation, hilly, and in some parts rocky. No part of it now remains. About fifty years ago, a small portion of it, called Slut's Bush, had not washed away. The sand on its shores, and most of which has been washed by the currents from the north, has blown inward by the winds, covering the meadows within, and in some places filling the navigable channels and harbors on the west. In some places the waves of the ocean have swept across the beach, and transported immense quantities of sand to the meadows in a single tide."

"The wreck of the Old Ship is on the second lot of the Potanumaquut meadows." This was always known as the Old Ship lot, but why it was so called no one could explain. Now the reason is apparent. The position of the wreck has not probably changed since it sunk in the place where it now lies. At low tide there are about two feet of water around it, showing that at high water there was a sufficient depth to have floated a vessel of seventy tons burthen. Every portion of the wreck is below the surface of the meadows. These

\*The first recorded division of these meadows was in 1750.—The inference is that they were in process of formation up to that time, but had not become valuable for moving until that date.

The salt-meadows have a certain frontage along the beach, the boundaries being usually a stake and stones. These are occasionally found outside the beach, which has travelled inland. Leander Crosby, Esq., found one of these, a cedar stake, where the tide ebbed and flowed. It was marked with the initials, "R. S." Doubtless, Richard Sparrow.

two facts prove that this vessel was not cast away upon a beach nor on the meadows.

"At the present time a wreck sunk in such a situation would be covered with sand and mud in the course of a month. Similar causes existed then, and it is safe to assume that Capt. Johnston's vessel was covered up very soon after she was lost.

"Salt meadows do not form on a shore where a surf beats, or where a strong current exists. While the ancient entrance to the harbor was open, there was such a current on the west or inside of Isle Nauset, which prevented the formation of salt meadow near the wreck. After the closing of the old entrance, the current turned west of Pochett and Sampson's islands, and found an outlet through Pleasant bay, to Chatham harbor, thus leaving a body of still water favorable to the rapid formation of salt meadows. This view is confirmed by the Eastham records. That town was settled in 1646, and in the early division of meadows, the Potanumaquut are not named. As salt meadows were considered more valuable then, than at the present time, it is surprising that they are not named till 1750, if they had then existed.

Records cannot be quoted to prove the antiquity of this wreck, neither can it be proved by living witnesses; we necessarily have to rely on other testimony. That the rust had entirely consumed all the iron used in its construction is evidence of its antiquity. The position of the wreck in reference to navigable waters, to the salt meadows, and to the beaches is reliable testimony.

"Now it is perfectly certain that this wreck must have

been in its present position since the year 1750, or 113 years, for since that date there have been no navigable waters within a quarter of a mile of the spot where it lies. It is also certain that it must have been in its present position during all that period, prior to 1750, while the meadows were forming around it, and on the west. If it is admitted that those meadows are of recent formation, one hundred years would be a low estimate, making the whole time 213 years.

"If it be said that the Potanumaquut meadows belong to the older and not to the recent formation, it proves too much; it proves that the wreck has been in its present position many centuries—that it is the remains of an old ship in which the Northmen, or other ancient navigators sailed.

"The position of this wreck in reference to the salt meadows and to the beach, is the best possible evidence of its antiquity. If driven there it must have been by a westerly wind, which would cause a low tide. Admitting that the vessel of which this wreck is the remains, was, by some unknown cause, forced on the meadows, how was the wreck buried below the line of the surface?

"To suppose that she was so buried on hard meadows by natural causes is an impossibility. That the wreck was there first, and the meadows formed over it, seems a self-evident truth, and judging from the rate at which similar meadows have formed, two hundred and thirty-seven years is not an unreasonable length of time to assign for the formation of the Potanumaquut meadows, and consequently the length of time that the wreck of the Old Ship, at Orleans, has remained in its present position.

"Those who are not aware of the remarkable geological changes that have occurred on the eastern coast of Cape Cod since its discovery, doubt the truthfulness of Archer, who was the historian of Gosnold's voyages. I have in this article assumed that he was a careful and an accurate observer, and faithfully recorded what he saw. Great geological changes make their own records; they leave in the strata and in the various deposits, the footprints which the scientific student of nature can trace and follow.

"Cape Cod was discovered by Bartholomew Gosnold, May 15th, 1602, O. S. He anchored at first near the end of the Cape, which he called Shoal Hope, but afterwards changed to the name it has since retained. Afterwards he anchored in the harbor, in latitude 42°. On the 16th he sailed round the Cape. After proceeding twelve leagues in this circuitous course, he descried a point of land 'a good distance off' with shoals near it. He 'kept his luff' to double it, and after passing it 'bore up again with the land' and at night anchored, where he remained that night and the following day, May 17.

"He saw many shoals in that vicinity, and 'another point that lay in his course.' On the 18th he sent a boat to sound around the point, and on the 19th passed around it in four or five fathoms and anchored a league or somewhat more beyond it, in latitude 41° 40′.

"Nothing is named in this account that the most careless observer would not have seen and noted.

When he discovered the first point he was off Eastham, a little north of the beach where the 'Three Lights' are now located. He saw the danger, and like a prudent mariner kept his luff to avoid it. The shoal he called Tucker's Terror, the headland, Point Care. After passing Point Care he bore up again to the mainland. This description of the coast is simple and truthful. To determine the exact position of Point Care, is attended with some difficulty. That it was the north end headland of the island named by Capt John Smith 'Ile Nawset,' there appears to be no reason to doubt. The only difficulty is in determining precisely where the north end of that island was in 1602. The northern end of it, which persons living remember, was opposite the present entrance to Nauset Harbor. In 1602 it probably extended half a mile further north, that is, as far north as the low beach extended.

"That persons now living remember, John Doane, . Esq. now seventy years of age, was born in the immediate vicinity of Point Care, his father and grandfather, in fact all his ancestors from the first settlement, owned the land and meadows between He Nawset and the main. He says that within his recollection Point Care has worn away about half a mile. When his grandfather was a boy, Point Care extended much further into the ocean than it did when he was young.

These are not vague and uncertain recollections. Mr. Doane points to monuments, and the exact distance that the ocean encroached on the land within his recollection can be ascertained. He states that fifty years ago a beach extended from the present entrance of Nauset

harbor half a mile north, where the entrance then was. Within this beach his father owned ten acres of salt meadows, on which he for several years assisted him in eutting and raking the hav. Now where that beach was there are three or four fathoms of water, and where the meadows were is a sand bar on which the waves continually break, and make Nauset harbor difficult of access. Within his memory the north beach, connected with Eastham shore, has extended south one mile, and the whole beach has moved inward about its width, say one fourth of a mile. Formerly there were navigable waters between Nauset and Potanumaquut harbors. It is about a century since vessels have passed through, and about fifty years since the passage was entirely closed. This is caused by the moving of Nauset beach inward. Dunes always travel inward, never outward, let the direction be what it may.

"Mr. Doane says that his grandfather informed him, that when he was young, a rocky, swampy piece of land, known as Slut's Bush, was about in the middle of Isle Nauset; that many berries grew there, and that he had repeatedly been there to pick them. When the present John Doane was a lad, only the western edge of this swamp remained. The roots of the trees and bushes that grew there ran under and between the rocks and stones, and when the waves undermined the rocks, the whole, rocks, stumps and roots, settled together. Slut's Bush is now some distance from the shore, in deep water; vessels pass over it, and on a calm day the stumps and roots may be seen at the bottom. The fisherman sometimes gets his line entangled with them

and pulls them up. During violent gales of wind they are sometimes loosened and driven to the shore.

"Beyond Slut's Bush, about three miles from the shore, there is a similar ledge called Beriah's Ledge, probably formed in precisely the same manner as Slut's Bush ledge is known to have been formed. Six nautical miles south of Point Care, Gosnold discovered another headland, which he named Point Gilbert. Archer furnishes us with all the particulars respecting the soundings, the straits, his passing round it, and anchoring a league or more beyond, in latitude 41° 40'. We have historical and circumstantial evidence that Point Gilbert existed in 1602; it united with the main land at James Head, near Chatham lights. From James Head on its south shore, it extended nine miles on an east-by-south course, to its eastern terminus, afterwards known as Webb's Island, situate where Crabb's Ledge now is. Cape Care was worn away by the gradual abrasion of the waves; over Point Gilbert the sea, during a violent gale, swept, carrying away long sections in a single day. The inner ledge on the line of Point Gilbert is known as Island Ledge, and the name indicates that the sea broke over the point at two places about the same time. Rev. Dr. Morse states that Webb's island at one time contained fifteen acres of rocky land covered with wood from which the early inhabitants of Nantucket procured fuel.\* The process which has been described as having occurred at Slut's Bush ledge also occurred at Crabb and Island ledges; the stumps and roots of the trees were earried down by

<sup>\*</sup> See Morse's Universal Geography, I., 357, ed. 1793.

the superincumbent rocks. Mr. Joshua Y. Bearse, who resided many years at Monamoit point, and has all his life been familiar with the shoals and ledges near Chatham, informs me that it is very difficult to obtain an anchor lost near either of these ledges; the sweeps used catch against the rocks and stumps at the bottom where the water is four fathoms deep. He also states that after the violent gale in 1851, during which the sea broke over Nauset Beach where the ancient entrance to Potanumaquut harbor was, and where the entrance to Chatham harbor was in 1775, with a force which seems almost incredible, sweeping away banks of earth twenty feet high, cutting channels therein five fathoms deep, moving the sea around to its very bottom, and tearing up the old stumps which had been there more than a century, — Mr. Bearse states that more than one hundred of these drifted during that gale to the shore at Monamoit beach, and that he picked them up for fuel. A part of these were stumps that bore the marks of the axe, but the greater part were broken or rotted off.

"These old stumps did not grow under the water; they did not float to the positions from which they were dragged up; they grew in a compact rocky soil overlying a loose sand. The waves and the currents removed the loose substratum, and the rocks and the stumps went down together into the deep water where they are now found. From the place where Gosnold anchored, a league or more from Point Gilbert, there was an open sea to the southwest. Monamoit beach, which projects out eight miles south from Morris island, did not then exist; there was nothing there to impede navigation."



["Prof. Agassiz who is the author of the geological theory which the accompanying map delineates, furnishes us with the following note, dated Cambridge, December 17, 1863.

"Surprising and perhaps incredible as the statements of Mr. Amos Otis may appear, they are nevertheless the direct and natural inference of observations which may easily be made along the eastern coast of Cape Cod. Having of late felt a special interest in the geological structure of that remarkable region, I have repeatedly visited it during the last summer, and in company with Mr. Otis examined on one occasion with the most minute care, the evidence of the former existence of Isle Nauset and Point Gilbert. I found it as satisfactory as any geological evidence can be. Besides its scientific interest, this result has some historical importance. At all events it fully vindicates Archer's account of the aspect of Cape Cod, at the time of its discovery in 1602, and shows him to have been a truthful and accurate observer.—Editor."]

It only remains to state the facts in regard to the final recovery and saving of the wreck. Messrs. Leander Crosby and John Doane, Jr., assisted by Solomon Linnell, 2d, Alfred Rogers, and others, conveyed the planks and timbers, at various times, to the upland. One mass, including the keel and thirteen timbers, was thrown out by the sea, and was at once secured. The whole was collected together, on the premises of Mr. Crosby, whence it was conveyed to Boston, and the pieces restored to their original position, as already related, by Messrs. Dolliver and Sleeper.



